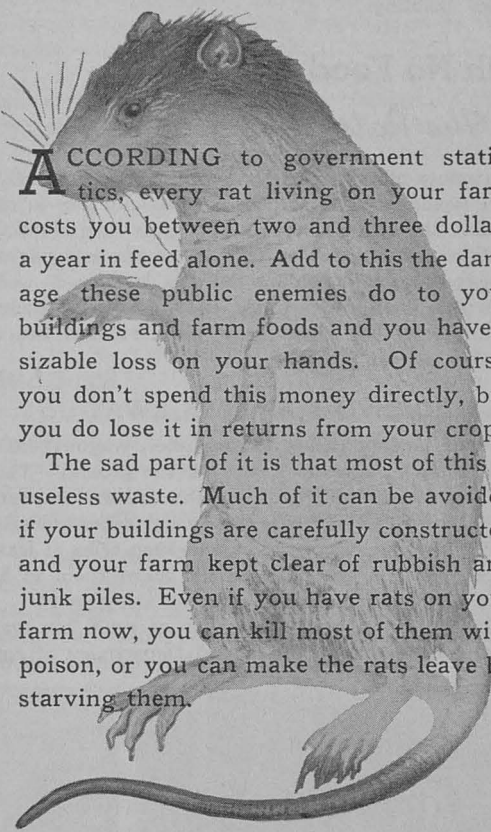


Rat Control

H. L. Parten



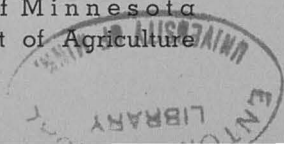
ACCORDING to government statistics, every rat living on your farm costs you between two and three dollars a year in feed alone. Add to this the damage these public enemies do to your buildings and farm foods and you have a sizable loss on your hands. Of course, you don't spend this money directly, but you do lose it in returns from your crops.

The sad part of it is that most of this is useless waste. Much of it can be avoided if your buildings are carefully constructed and your farm kept clear of rubbish and junk piles. Even if you have rats on your farm now, you can kill most of them with poison, or you can make the rats leave by starving them.

Agricultural Extension Service

University of Minnesota

U. S. Department of Agriculture



THE new ever-normal granary program has made the rat problem even more serious than before. Now, instead of feeding or selling the grain, the farmer may store it himself. Since many farmers have had no experience in storing grain, especially corn, the rats are practically invited to make their homes around the farmers' buildings.

With No Food or Shelter

--- The Rats Will Leave

"An ounce of prevention is worth a pound of cure," an old saying goes. And this is especially true in rat control. The cost of keeping rats from over-running your farm will be only a fraction of the expense of buying poisons and feeding the rats later.

Rats are most often found around feeding racks, corn cribs, lumber piles, straw piles, rubbish heaps, and other similar places.

HOW TO KEEP RATS AWAY

1. Place feeding racks, lumber piles, wagon boxes, etc. on racks at least 18 inches off the ground. This eliminates immediate shelter for the rats and exposes them to the attacks of cats, dogs, and other animals.

2. Put flooring in corn cribs and keep cribs at least 18 inches off the ground. Do not allow them to lie on 2x4's or 2x6's placed directly on the ground.

Plans for an approved corn crib or grain bin may be obtained by writing the federal Department of Ag-

Good Cribs—No Rats

riculture, Washington, D.C., Extension Division, University of Minnesota, or from your county agent.

3. Always keep lumber piles, fence posts, wagon boxes, etc. away from cribs.

4. Clean out old straw pile bottoms at least every year.

5. Clear away corn stalks and rubbish about every two weeks.

6. Keep your farm clear of junk.

7. Keep all grain and foodstuffs out of reach of the rats.

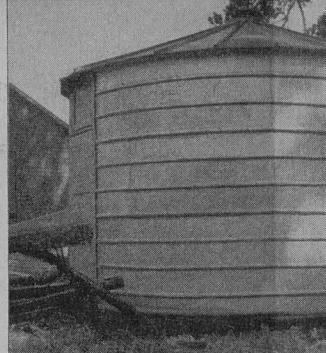
Poisons with Appetizing Baits

--- Spell Doom to the Rats

Once there are rats present on your farm there are two things you can do. First, you can eliminate their source of food and shelter, and they will leave for a better home. Second, you can kill them off with rat poisons.

Start control as soon as you see rats around your buildings. Immediate control is necessary because rats reproduce rapidly. Actually the average offspring of one pair of rats is 72 a year. It is possible for rats to start breeding when they are six weeks old and obtain a litter in three weeks.

Poor Cribs—Rats



PROPORTIONS

Mix one part by weight of barium carbonate with four parts of any kind of food the rats are not already obtaining in abundance.

APPETIZING BAITS NECESSARY

We recommend these baits for poisons: Chopped lean meat, sausage, fish, liver, bacon, egg, apple, tomato, melon rind, mashed sweet potato, banana, cheese, cereals, peanut butter, sweet corn, fresh blood, and milk.

If the rats refuse to take the bait you first offer, it is not due to the presence of the poison. Try another kind of bait. For example, on farms where grain is plentiful, the rats probably prefer meats, but around packing houses where there is much meat they want grains or vegetables.

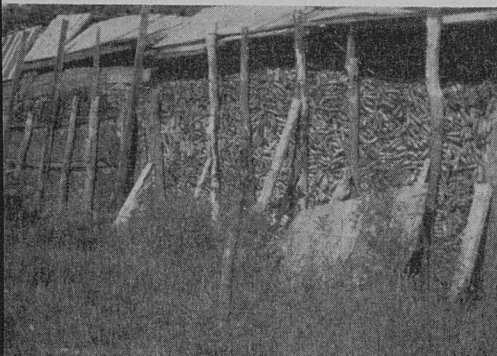
Do not be afraid to handle the bait a little. The belief that rats will avoid food handled by man is foolish. If they did, they would soon starve to death.

Usually it is much cheaper to buy rat poisons by their chemical names rather than to purchase them in their more expensive commercial form as paste, biscuit, or powder. Some of these poisons are listed.

Barium Carbonate

ADVANTAGES—Barium carbonate is our best rat poison. It is odorless and tasteless, and when it is mixed with bait, it cannot be detected. It acts very slowly, giving the rats time to die in the open while they are seeking water. Cats and dogs are not poisoned if they eat rats killed by barium carbonate.

DISADVANTAGES—There is one serious objection to barium carbonate, however. It is very poison-



ous to men and animals if too much is eaten. Because of this, barium carbonate should be placed in the following way so that only rats can reach it.

Place the poison under an inverted box which has a hole cut on either side large enough for the rat to enter. Directly over this box place another larger box also having a hole cut on either side. This will prevent other animals from reaching inside through the holes and taking the bait.

Place a heavy weight on the top box so that it cannot be tipped over by other animals. Cover the bait station with boards, rags, tin cans, and whatever rubbish you can find, making the entire thing look like a garbage pile. The more this looks like a garbage pile, the quicker the rats will enter.

Examine the bait station every three or four days, taking out the dead rats and supplying new bait. A few dead rats left lying around the trap, however, often scare the other rats away from the farm.

Red Squill

ADVANTAGES—Red squill is relatively harmless to men and domestic animals, and therefore it is often considered the ideal rat poison. No special bait station is needed, and it may be spread around the premises without fear of poisoning other animals.

DISADVANTAGES—This poison, however, has a distinct odor and taste. Since the rats often will not eat enough of the squill to give them complete paralysis, they recover from the poisoning. After that they avoid any bait smelling of squill.

Yellow Phosphorus

Yellow phosphorus should be used only when other poisons are not available.

DISADVANTAGES—It has a distinct odor and taste, and in addition to this is luminous. For these reasons, some rats will stay away from it. Yellow phosphorus, moreover, is a fire hazard around wooden buildings.

**Other Poisons****3 1951 D04 088207 L**

Thallium sulfate, sodium arsenite, and arsenious oxide also have a distinct odor and taste which makes rats avoid them. Unless you cannot get barium carbonate, avoid these poisons.

CAUTION—Handle all rat poisons with care. They are all more or less harmful to men and animals. Label all poison containers plainly and keep them out of the reach of children.

Fumigation Often Satisfactory

--- But Handle It Carefully

Rat runways which are tight enough to confine gas can be fumigated with calcium cyanide (Cyanogas) which can be purchased from drug stores or seed houses. Tight runways are often found under dirt and cement floors.

Often the best way to rid corn cribs of rats is to pump cyanide gas into the crib at four foot intervals from the windward side. Although some rats are killed in the cribs, many are only routed out. They stick around the farm unless poison bait is used to follow up the fumigation.

Many county agents have cyanide applicators or have access to them. They will give demonstrations on the use of cyanide gas to groups of farmers.

Do not attempt this method of control unless you have seen an actual demonstration or have instructions on the use of cyanide gas. Cyanide gas is very deadly and should be handled with greatest care.

UNIVERSITY FARM, ST. PAUL, MINNESOTA

Cooperative Extension Work in Agriculture and Home Economics, University of Minnesota, Agricultural Extension Division and United States Department of Agriculture Cooperating, P. E. Miller, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.

20M-4-40